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AUTHOR Sanua, Victor D.
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ABSTRACT

The paper analyzes research regarding the effects of sociocultural factors and the incidence of mental illness, particularly infantile autism and childhood schizophrenia. Among those topics reviewed are general sociocultural changes and vital statistics, perceptual and cognitive potential of the neonate, the importance of family networks for pregnant women, establishment of bonding between mothers and children, lack of bonding and consequences on the mother-child relationship, organicity versus environment in child psychosis, socioeconomic and sex factors, and child rearing in developing countries. Cross cultural research is cited to show the rarity of infantile autism among such ethnic groups as Hispanics, Blacks, and Chinese. (CL)

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CULTURAL CHANGES AND PSYCHOPATHOLOGY IN CHILDREN: WITH SPECIAL REFERENCE TO INFANTILE AUTISM

VICTOR D. SANUA, Ph.D.

Adelphi University School of Social Work
Garden City, New York

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CULTURAL CHANGES AND PSYCHOPATHOLOGY IN CHILDREN: WITH SPECIAL REFERENCE TO INFANTILE AUTISM

Victor D. Sanua, Ph.D.*

INTRODUCTION

The purpose of this paper is to try to relate the sociocultural changes that have been taking place in the last few decades to the increasing number of children brought to the attention of professionals in mental health. We shall try to speculate on the relationship between changes within the family structure and the incidence of mental illness among children with particular reference to infantile autism and childhood schizophrenia and the relationship between the frequency of such serious psychoses among various subcultural and cross-national groups and their child-rearing practices.

Because of the basic interdisciplinary nature of our approach, we expect to derive data from various sources: sociology , vital statistics developmental psychology, pediatrics, anthropology and psychiatry. It is felt that a familiarity with the contributions in these various fields will make for a better understanding of the symptomatology of infantile autism and childhood schizophrenia in various cultural and sub-cultural groups. It is believed that the basic changes in child-rearing practices over the years could be implicated in the higher frequency of mental illness among children today.

Many books (Yorburgh 1973, Queen, 1974, Skolnick and Skolnick, 1977) have been devoted to the study of the changes that have ocurred in the western family, from extended to nuclear families, the smaller number of children, the increasing number of women (even mothers of very young children) joining the labor force, the geographical and economic mobility

*Professor, Doctoral Program, Adelphi University School of Social Work, Garden City, L.I., N.Y.

of the younger generations of parents, the emancipation of women, the relaxation of sexual mores and the increasing number of divorces. The overall result is that women spend a smaller percentage of their life raising children. (Rossi, 1972). Since the child is so much influenced by the family structure, changes within that structure are bound to have an enormous impact on his socialization and mental health.

I. GENERAL SOCIOCULTURAL CHANGES AND VITAL STATISTICS

One vital statistic that stands out is the increasing rate of divorce. It is estimated that the rate has doubled since 1965; in 1976 there were 2,000,000 marriages and more than 1,000,000 divorces. Since 1968, the number of children who live with one parent or neither parent has jumped to 13 million, an increase of 29%. Also, an increasing number of young children are committing suicide because of depression. The "field" of depression in children was almost nonexistent about a decade ago (Jerome, 1979).

Bardis (1964) who reviewed the family from the historical perspective, has emphasized that war, economic crises, urban crowding, the emancipation of women, commercialized recreation, modern methods of contraception and other forces have reinforced the prevailing disorganization and disintegration of the family.

The following reviews of studies derived from empirical research represent some of the negative influences presumed to affect the psychological health of children.

It would seem that social and geographical mobility (Gordon and Gordon, 1959) has increased the incidence of postpartum depression in young mothers, and the greater upward mobility of the father has contributed to the poor emotional adjustment of the children (Epstein, 1968).

Why is it that a child whose material needs are fully supplied becomes psychotic, while

the child on the other side of the tracks does not? Beach (1957) found an easy answer to this paradox. Subjective feelings of father and mother may be unexpressed or unknown. Because of internal conflict, anxiety or uncertainty in one or both parents, they are unable to express the love they really feel for the child. The child becomes disturbed an bewildered at these things which he cannot understand and may eventually withdraw from this puzzling outer world. Beach states, "He has nothing specific to deal with except outward appearance that he senses as false and unreal" (p. 460).

According to Beach, it would appear that the smallest infant reacts to the unspoken emotions of the parents. The mother's isolation can result in disorders in gastrointestinal functions, feeding, marasmus and so forth in the baby.

II. PERCEPTUAL AND COGNITIVE POTENTIAL OF THE NEONATE

During the past decade data has accumulated from studies of neonates showing that they are born with a tremendous number of sensitivities. In 1975 Yarrow, Rubenstein and Pedersen pointed out:

> Our image of the young infant has changed strikingly in the past decade. We no longer see him as an undifferentiated organism who responds globally and diffusely to stimulation, but we see him as an individual with some degree of differentiation in his response repertoire. Therefore, we broke down the global development quotient into a variety of functions, distinguishing gross and fine motor skills, vocalization and language social responsiveness, object permanence, and such cognitive-motivational functions as goal-directedness and secondary circular reactions. We also measured the infant's visual and manipulative exploratory behavior and his preference for novel objects. (p. 157)

Bower in England (1977) pointed out that experiments have shown that the infant has an extremely sophisticated perceptual system that permits him to see an organized, three-dimensional world right from the beginning. On the other hand, this system is extraordinarily

vulnerable during its development. It needs the proper sights and sounds to grow on, just as the muscles need appropriate excercise.

Desmond et al. (1966) found that it is possible to demonstrate that during the first hour of life, the infant can see, that he has visual preferences and that he will turn his head to the spoken word. After this hour, he will go into a deep sleep for three to four hours. Thus one hour after birth, he is well equipped for that important first meeting with his parents (p. 66).

III. IMPORTANCE OF FAMILY NETWORKS FOR PREGNANT WOMEN

Pregnancy is a time of strong feelings and emotions which are much affected by the family network. There is a need to adapt to a new way of life and to cope with a serious develop - mental crisis. In previous generations and in non-Westernized societies with close-knit family structure, the problems of this transition tend to be minor. In the extended family the pregnant mother could rely on her own mother for moral and physical support, an instance of "the mothering of the mother." The success of breast feeding literally depends on such a supportive environment (Raphael, 1966). Assistance in the physical needs, housework, and other obligations of the pregnant mother together with the psychological help provided would certainly be conducive to a more wholesome atmosphere when the child is born (Saucier , 1978) than is the case in the nuclear family.

Today the mother, particularly the primaparous has never had the experience of handling infants except perhaps while baby-sitting. She is found to be fearful regarding her ability to cope with the problems of raising a baby. In developing countries the young girl may actually see the birth process and gets experience handling infants while the mother engages in farm work. The following report given to Dr. Klaus by an American anthropologist illustrates an example

of familial support:

> When a woman is about togive birth in the hospital, according to anthropologist Schreiber (1974), the members of the family congregate outside the labor and delivery rooms. Within 5 minutes of the birth the parents, grandparents, and, on the average, five other relatives will have kissed the baby. Within the first 20 minutes, the mother-in law, who holds the baby first, returns him to his mother. The news of the birth is quickly dispatched to the parents' home, and a pink or blue rosette, depending on the sex of the baby, is hung on the front door. The birth has been officially announced, and visits by all the near and distant relatives, acquaintances, and neighbors begin. Schreiber found that within six weeks, in a town of 1500 people, 80% of the households had visited the home of the newborn baby.

Feiring and Lewis (n.d.) have discussed at some length the changing characteristics of the U.S. family and the implications for child development. They feel that it is insufficient to discuss the developmental consequences of a cohort of children without appreciating the fact that child development is a function of the social network. According to them, other social objects besides the mother are important to the development of the child: the father's support of the mother, peers, siblings, other family members and so on. Feiring and Lewis refer to Aug and Bright (1970) who found that the psychological development of children born out-of-wedlock to parents who had the support of other relatives was "normal" and might be less traumatic than many born in wedlock into two-parent families.

Kenneth Keniston (Despert, p. 168, 1964) points out, "Not only parents but grandparents, aunts, uncles have disappeared. Kinship networks have been dispensed with as parents relocate to follow jobs and promotions. Brothers and sisters are increasingly scarce too. Sixteen years ago, the average child had almost three siblings. Today, the statistically average child has less than one."

The importance of the family network with particular reference to autistic behavior has been studied by Ferster (1961). His basic contribution is that the clinical symptomatology of the autistic child is essentially a poor repertoire of behavior because of the failure to reinforce normal social behavior which requires extensive parent-child interaction. At times, unresponsive parental behavior may be the result of depression, physical illness, preoccupation with other activities, etc. He also felt that siblings, relatives and neighbors could have a mitigating effect. This is why Ferster thinks the illness is rather rare and occurs more commonly with the first-born child and with socially isolated parents.

It was noted in our review of the literature that very few studies have appeared in Scandinavian journals on purely autistic children. It is possible that extensive child-care facilities in Scandinavian countries may tend to reduce the frequency of autism. A six-nation child care study conducted by Kamerman and Kahn (1979) , of Columbia University, revealed that the United States lags behind France, Sweden, the two Germanys and Hungary. All but the United States have maternity benefits and leaves of 14 weeks to nine months, to allow mothers, and alternately, fathers, "opportunity to develop a strong relationship with infants before returning to work."

IV. ESTABLISHMENT OF BONDING BETWEEN MOTHER AND CHILD

For a number of years, Klaus and his group of researchers (1976) have found that the newborn is able to interact with the mother who can establish some "bonding" with the infant. They provide evidence to the effect that home births, in contrast to births in hospitals appear to develop a state of ecstasy which is contagious. Especially striking is the intense interest of the mother in the first fifteen to twenty minutes of life. They also pointed out that most anesthetics do depress infants' responsiveness and are likely to influence negatively the first interactions between mothers and infants. Klaus (1972) found that mothers who had extended contacts with their newborn infant one hour with the infant three hours after birth and five hours for the next three days in addition to routine contacts showed differences in mothering behavior one month after birth from mothers who had had only routine contacts with their infants. Kennell et al. (1974) in a follow-up of these mothers, found that after one year, mothers in the extended contact groups were more preoccupied with their baby when away from him and during physical examinations spent more time soothing the baby than the other mothers. It is expected that such sensitivity has a bearing on the child's behavior as well as on his cognitive and linguistic development. Thus hospital practices such as providing the mother an opportunity to spend time with her child seem to have long lasting beneficial effects.

Ringler et. al. (1975) conducted a two-year follow up of the same children, and studied the verbal interactions between mother and child. The findings suggest aht the extended contact mothers had a greater awareness of the needs of their children and were able to interpret their widening external environment as they became older.

Leifer, Leiderman and Barnett (1972) found that full-term mothers maintain significantly more close contact between themselves and their infants and smiles more at them than mothers

of premature babies. These studies show that the first few hours of life could be crucial in establishing a relationship between mother and child. A lack of such "bonding" between mother and child could have unfavorable consequences.

A question often raised is the appropriateness of attributing the illness of a child to early faulty socialization. The mother already has tremendous difficulties raising a handicapped child; her burden would be compounded by extreme guilt if she is held responsible for the child's faulty socialization and her relationship with her child would be further complicated.

However, I believe that, by and large, it is not the general nature of the mother that is the source of the problem, but rather the difficult period that the mother had to go through at the time of the birth of the child which was beyond her control in combination with the restrictions imposed by the structure of the hospital where the infant was delivered. Interestingly, it has been found that schizophrenics and manic depressives, but not for other mentally disturbed groups studied, were born disproportionately during the winter months (1974) It may be speculated that there is less physical contact and cuddling during the cold weather.

IV. LACK OF BONDING AND CONSEQUENCES ON THE MOTHER-CHILD RELATIONSHIP

I have already indicated earlier that the first hours after birth could be very crucial in establishing a healthy relationship between mother and child.

Generally two arguments are provided to support the fact that children's psychoses are of organic origin. First, the disturbance is noted quite early, presumably before the time when the child can be affected by his environment, but the data provided by developmental psychologists and pediatricians indicate the fallacy of this position. The second argument supporting the organic nature of psychoses in children is that it is difficult to explain why one child is affected and another of the same mother is not. It must be stated from the outset

that no two infants could possibly interact the same way with their mother. The events take place at two different periods of time in the mother's life. Kanner (1943) has speculated on the "refrigerated parents" who may be responsible for the autism. Such parents may exist, but on the other hand, it is also perfectly possible that a warm, loving mother may give birth to a child at a very crucial moment in her life when she goes through some upheavals such as the death of a loved one, marital problems, crises of identiy, and others which may cause a temporary depression, and the newborn receives the brunt of her problems. Call (1966) has shown that any stress, such as financial probiems, marital infidelity, the death of a close friend or relative, a previous abortion or the loss of previous children may retard "bond" formation. Evans, Reinhart, and Succop (1972) discovered that one third of the parents with a failure-to-thrive infant without organic disease have recently suffered from the loss of a close relative. It would appear that while mourning for a relative, the mother is unable to cope with the needs of her infant. Thus it is possible for a mother to give birth to two children, provide one with all the love, attention and care that she has and be unable to provide the nurturance needed for another child for reasons beyond her control.

Tinbergen (1976) a Nobel Prize winner in 1973, writes the following in connection with parental involvement. He exonerates the cold, rejecting mother with the following words:

> "...First, that many autists are potentially normal children whose affiliation and subsequent socialization processes have gone wrong in one way or another; and second, this can often be traced back to something in the early environment--on occassion a frightening accident, but most often something in the behavior of the parents, in particular the mothers. Let me hasten to add that in saying this we are not blaming these unfortunate parents. Very often they seem either simply inexperienced (hence perhaps the high incidence among firstborns)or overapprehensive; or overefficient and intrusive; or, perhaps most often they are people who are themselves under stress. For this and many other reasons, the parents of autistic children deserve as much compassion, and may be as much in need of help, as the autists themselves" (p. 23).

Zaslow & Breger (1969) feel that if the attachment to the mother fails to develop, the child will not learn the social smile, will fail to acquire language and be unable to

relate to the environment. When the mother, for one reason or another fails to provide the child with the kinesthetic, visual and auditory stimulation, the child will be unable to form the crucial attachment that derives in part from being held. These authors speculate: that certain babies because of their nature are less "cuddly" than the average baby and as a result the mother is less encouraged to interact with the child. Thus it would seem that there are three variables involved in bonding. First, there may be the mother's frame of mind which makes her inaccessible to the emotional needs of the child, second the child's basic temperament prevents the mother from reacting appropriately to the child and the third variable is the setting of the birth itself, whether are given immediately to the mother or taken away fro them initially after birth. It may be possible that any one of these could be responsible for the lack of "bonding" and that the more serious cases may result as a consequence of the interaction of two or three of these complex variables.

In recent years, a Mothering Center was established in Greenwich, Connecticutt under the leadership of Dr. Martha Welsch. In view of the fact that a lack of mother-child bonding could be the root cause of mental illness and health, she has been experimenting in the establ ishment of this "bonding" between mother and child and has been involving other members of the family. She has shown that repeated physical holding between mother and child led to a significant improvement in the child's emotional and physical development.

The fact still remains that modernization at times has made mothers less accessible to their children. In modern days, according to Despert (1965) mothers with the need to pursue the ideal of providing their children with the material benefits of our times, have little time to provide the emotional security she should offer. It would seem that "instinctive motherliness is being smothered in the material wealth of modem life" (p. 242).

Liedloff (1977), who spent two and a half years with the Staone Age Indians in

the South American jungle, shows the "continuum sense" of the Indians' work in the effortless upbringing of children and the development of truly social adults. She points out some of the deleterious effects of the attempts of civilization to outwit our instincts. She states, "I would be ashamed to admit to the Indians that where I come from the women do not feel themselves capable of raising children until they read the instructions written in a book by a strange man." She feels that the conditions to which evolution has adapted us have so distorted us that we can no longer distinguish between what is suitable for human beings and what will make their lives miserable.

While it would be very difficult to show an immediate cause-and-effect relationship, it is hoped that enough evidence will be provided to implicate the sociocuitural changes in the family as the source of serious aberrations in children.

VI. ORGANICITY VERSUS ENVIRONMENT IN CHILD PSYCHOSIS

The following represent some of the diagnostic categories of the serious illnesses reported in the psychiatric literature and which have remained until now rather puzzling to the scientific world:

1. Primary autism
2. Childhood schizophrenia
3. Childhood aphasia
4. Atypical personality development or non-Autistic childhood psychosis
5. Minimal Cerebral dysfunction
6. Psychological dwarfism
7. Anorexia nervosa
8. Tourette's syndrome

There is some question as to whether the first four diagnoses constitute a common disease with different manifestations of symptoms because of the growing nature of the child. Vrono, a Russian psychiatrist, supports this theory, while Kolvin in England

finds that there are different processes in the psychotic manifestations of children. A majority of psychiatrists feel that childhood psychoses are biologically or organically determined. Present-day evidence supporting such generalizations tends to be rather weak, as pointed out by Ritvo (1977) when he stated:

> "In this brief annotation, we have surveyed the biological studies of patients with autism, childhood schizophrenia and related developmental disabilities. These studies have raised more questions than they have answered--a sure sign that our science is young" (p. 378).

Cohen (1978) after research and speculation on the deficiency of the neurotransmission system which may help cause stress in children instead of the other way around, points out that a great deal of research by a number of investigators will be needed to establish the truth or falsity of these and related ideas.

In the early forties, Lauretta Bender (1943) proposed with some conviction that children's psychoses were due to a "maturational lag at the embryonic level" and that there were only "soft signs" to indicate organicity. It is felt that Bender's speculations have had an undue influence on a generation of child psychiatrists. Kanner, who originally introduced the concept of infantile autism in 1943, tends to be more flexible regarding the cause of the illness. In his latest edition of Child Psychiatry (1972) he states:

> "Even from a purely statistical point of view, the correlation of childhood schizophrenia with parental attitudes is far higher and more consistent than its correlation with heredity, configuration in the body, metabolic disorders, or any other factor... Even these few examples suffice to show how, regardless of the problems of heredity and constitution, life experiences have confused these children, made normal relationships impossible and driven them to withdrawal and schizophrenic behavior." (p. 707).

Kanner (1972) reflects the feeling of futility among those who had organic notions:

> "The notion of schizophrenia as ancestrally preordained destiny and an irreversible "disease process' created a spirit of paralyzing futility. Occasional remissions were interpreted as the spontaneous work of inexplicable fate. Once the diagnosis was made, usually when the clinical picture was well developed, the children were interned in custodial institutions, there to yield to the

> temptation to further, if not complete withdrawal, which was thus fostered rather than remedied. Bankruptcy was anticipated and achieved" (p. 708).

A somewhat pessimistic outlook was reflected in Volume IV of the Task Panel Report submitted to the President's Commission on Mental Health (1978) in which it is stated that there are no specific biological treatments known to affect the basic symptoms of infantile autism. Behavioral techniques have been used with dramatic effect for teaching the spoken language. However, these procedures are extremely time-consuming and costly and, worse yet, may be limited to teaching the child to imitate sounds rather than to develop the complex communication skills he lacks. Clearly, mental health professionals can have no great or even modest hope for treatment for children with infantile autism (p. 1708).

Study of the autistic child is important particularly in that it provides leads to the principles underlying the development of the normal child. Because of the specific difficulties that the autistic child has in learning the language, a study of such cases could throw light on how children acquire speech. So far I have provided some evidence that the child-rearing practices today do not seem to be optimal in fostering well-being among children. It is hoped that Dr. Klaus's work will reverse the trend of the routine hospital deliveries to separate infants from their mothers. I have also indicated that the increase in children's mental disturbance may be attributed to the breakdown of the family networks resulting from geographical and economic mobility.

In view of the fact that the thrust of this paper is to try to relate sociocultural changes to the increase in fantile autism, I shall now try to provide evidence to reinforce that relationship. Basically, the major problem of the autistic child is an inability to relate themselves to others. One general finding is that austistic hchildren seem to come from economically superior homes and intellectually superior parents. Both Sanua (1979) and Cantwell, Baker, Lorion and Rutter (1978) have reviewed the literature. In the latter review the authors point out that none of the theories that try to explain the association on the

basis of social class appear to be plausible and all lack empirical support. They write:

> "The link between social class and autism does not appear to fit with a purely biological causation of autism, and it remains an awkward finding which still demands explanation" (p. 290).

However, an earlier review by Ornitz and Ritvo (1976) indicates that this superiority of parents of autistic children is not supported by three studies (McDermott et. al., 1967, Ritvo et. al., 1971 ,Allen et. al., 1971). Furthermore a group from N.I.M.H. (Keith et. al,. 1976) states:

> Much has been written about the background of the parents of autistic children, but one by one, the myths about them have fallen away in the face of well designed research protocols (p. 547)

and in support of their conclusions, they refer to one single study by Florsheim and Peterfreund (1974).

It must be stated that none of the samples, which the above authors have used to discount the superiority of the parents of autistic children actually had bona fide cases of autistic children as described by Kanner. However, a careful study of the results with non-autistic children, if anything, demonstrates that there is a tendency for the parents of highly disturbed children be be of higher S.E.S. and more intelligent than the general population. The above statement by Keith and his group is certainly in contradiction to the Report of the Research Task Force of the N.I. M.H. whose Chief Editor is Julius Segal. (1975). The following is a conclusion which was drawn by the author of this Report:

> One observation made years ago appears to be still valid: that the parents of an autistic child tend to be of higher intelligence and higher socio-economic level than either the general population or the parents of children with other psychiatric distorders. With only one important exception, numerous studies have attested to the difference, though suggesting that it is not quite so great as first appeared. The reason for the one exception is not clear. (p. 204)

The above report mentions one single exception without providing a reference. However, on the basis of our own analysis in depth of the literature, it is surmised that they are

referring to the study by Ritvo et. al. (1971). However, as indicated by King (1975), the study included cases of "pseudoretardates, children with atypical development, symbiotics and cases of childhood schizophrenia." Ritvo et. al. (1971) in a footnote to their article, pointed out that the "presence of other symptoms (seizures) or diseases did not preclude the diagnosis of autism" (p. 301). All that can be said is that there has been some careless reporting of the literature. To add to this confusion, Call (1977) writes, as derived from his reading of Ritvo et. al's study (1971), "No demographic studies of children showing autism have demonstrated a prevalence of autistic behavior in low socioeconomic classes or in poor neighborhoods, where one might expect a trend if underlying organic factors were dominant as an etiologic consideration."

The reason for the importance of relating socioeconomic status and infantile autism is because higher SES goes hand in hand with mobility and nuclearization of the family. Those who "make it" are not likely to have parents, uncles and aunts and other relatives in their homes or living close by.

VII. EVIDENCE OF THE IMPORTANCE OF THE ENVIRONMENT ON THE SOCIALIZATION PROCESS OF THE CHILD: SOCIOECONOMIC AND SEX FACTORS

Let us now turn to developmental psychologists and see what they have to say about the influence of social class, and the sex of the child on the behavior of the mothers towards their neonate. A review of the literature on infantile autism reveals that the illness is more frequent among boys and less frequent among lower-class children. The two studies following may provide some clues regarding those differences in psychopathology.

Studies have shown that males and females are treated differently from very early ages. Lewis (1972) has shown that mothers of boys generally showed more proximal behavior (holding, touching) and mothers of girls more distal stimulation (vocalizing, looking and smiling). The question that could be raised is whether this difference in attitude based on

the sex of the infant could be related to the fact that boys' speech tends to be more disturbed than girls'. Furthermore, the ratio of male-female infantile autism and childhood schizophrenia is 3:1 and at times 5:1 or more.

Lewis and Wilson (1972) found that working-class infants were as likely or even more likely to vocalize spontaneously than middle-class infants. Maternal touching, holding, smiling, looking and playing were more frequent among lower SES groups than among middle-class mothers. At twelve weeks, the lower-class infant tended to be superior to the middle-class infant in cognitive functioning although there is evidence that after three years, middle-class children perform better. It is possible that because of crowded conditions and small apartments, infants of lower-class families have a greater opportunity to interact with their environments. The middle-class child who is less likely to have siblings may sleep in a separate baby room.

VIII. CHILD-REARING PRACTICES IN DEVELOPING COUNTRIES

Recent studies in child-rearing practices in developing cultures have shown that mothers and parental surrogates provide much more attention to infants than they do in our own modern culture. According to Klaus and Kennell (1976) in some areas of the world, the baby remains on the mother's body from birth on. A woman in Africa who carries her baby on her back or side is identified, after the seventh day as a poor mother if her baby wets or soils her if she cannot anticipate his or her elimination behavior. This fully tuned awareness of the baby is almost inconceivable to those mothers whose babies are kept apart much of the day and sleep in separate rooms at night. Du Bois (1960) in an early classical study of the Alorese pointed out that babies are never left alone even when asleep, and they are not left to cry. DeVore and Konner (1976) report that the Kalahari mothers on the average

let the child cry six seconds during the first year before they respond.

Studies conducted in those areas also show that the infants go through a faster motor and cognitive development compared to the infants raised in North America because of the intensive attention that they receive. Brazelton (1972) in a study of Mayan Indians of Mexico reports the following:

> ...the general disorganization of states and lack of coordination that we are accustomed to see on day 1 and 2 in North America infants was not evident in these neonates. State behavior was also dissimilar to that of United States babies, the Zinacantecos maintaining quiet, alert states for long periods, with a slow smooth transition from one state to another. We recorded none of the deep sleep, intense crying or intense sucking states observed in the American controls. The apparent control of state and mother behavior in Indian infants seems to be of a higher order, permitting repeated and prolonged response to auditory, visual and kinesthetic stimuli in the first week of life" (p. 102).

Similar precocious development was found by Lewis (1972) among the Wolof babies in Senegal and by Kilbride and Kilbride (1975) among the Baganda infants, particularly in their sitting and smiling behavior. Such differences in development could also be found in modern cultures. Anisfeld (1979), reported on research in Israel, where she was interested to find differences in the onset of the first social smile in full-term babies and those born prematurely. While establishing this difference was not the purpose of her research, in comparing babies from Sephardi and Ashkenazi families, she found that the former tended to smile sooner. She states:

> "There are certainly striking differences in the way the infants are handled in the Ashkenazic and the Sephardic homes, e.g., the Sephardic infants are often present (awake or asleep) in the main room of the apartment where there is much activity. They tend to be held after feeding, and generally included in the household affairs right from birth. The Ashkenazic infants were often found in their cribs, in a separate room. After feeding, the object was to get them back to sleep in their own rooms. Whether these differing treatments contribute to the earlier onset of smiling will require further study." (p. 6).

Anisfeld (1979) reported on a previous study by Wolff (1959) who found that there was an earlier onset of smiling among babies who were from Boston Irish families than among the babies from upper-middle-class Harvard College graduates.

Evidence of the Rarity of Infantile Autism Among Certain Ethnic Groups

On the basis of this discussion it can be speculated that in generally non-nuclear families, the frequency of infantile autism may be non-existent or minimal. Using the cross-cultural approach, I shall provide support for this speculation from the experiences of psychiatrists and psychologists, which must be acknowledged as being subjective. However, I also expect to provide support for this contention from empirical research.

Yorburgh (1973) has pointed out that familism is the strongest surviving traditional value within the older Mexican-American community along with patriarchism and machismo. The maintenance of this strong familism in the United States and the slower changes that have taken place in Latin American may have been responsible for the rare occurrence or even nonoccurrence of infantile autism in Hispanic families. Dr. Padilla, Director of the Spanish Speaking Mental Health Research Center at University of California, Los Angeles, who is responsible for the preparation of a number of books providing complete bibliographic references and comments on the mental health of Hispanics., provided the following reply when queried about infantile autism among Hispanics: "The question of infantile autism and childhood schizophrenia in Latinos is a very interesting problem .To my knowledge, nothing has been written on autism and Hispanic Americans" (letter dated November 8, 1978).

In connection with Hispanic families, Queen (1974) stated that with the constellation of cultural values as an overriding assumption is that the family remains the single most important social unit. The theme of family honor and unity diffuses throughout Mexican American society, irrespective of social class variation and geographical location.

The upper class rancher and the lowly crop picker both think of themselves as family members and second as individuals. It is a familism that extends beyond husband, wife and children to relatives of both sides.

A few years ago I wrote to an Argentinian psychiatrist who had spent three years in the United States in a well known child psychiatric center, in fulfillment of his required professional residency. He has since returned to his own country, where he has been in practice for the past fifteen years.

In response to a letter inquiring whether he saw any autistic children in Argentina, he wrote:

> "I was able to see here and Kansas City the schizophrenic mother-child dyad, the symbiotic type of problems, and the three types described by L. Bender, plus the autistic child. However, this last entity is not frequent in this country. I have no statistics to prove what I am saying, but I am only giving you an impression of my clinical experience. The more common cases I saw were the symbiotic type. From a symptomatologic point of view, what we see here is the most disorganized type of behavior, but a lack of affectivity and a great deal of acting and movements, bizarre, purposeless, and wildly aggressive at times...
>
> The typical withdrawn child as described by Kanner is a rarity among the patients I saw. Usually here they show, as I said, a very disorganized type of behavior making the differential diagnosis between feeble-mindedness and schizophrenia sometimes difficult."

It is interesting to note that Romero Lara (1975) a Mexican psychiatrist, reviewing the history of infantile psychoses, indicated the following: "No data were found concerning such psychoses in Mexico and South America." The latter statement confirms the views expressed by our Argentinian correspondent.

Ir would seem, therefore, that the frequency of psychoses in early childhood appears to be less frequent in countries with a Latin background. The great enigma is whether this almost non-existence of such illness in early childhood could be attributed to the ethos of family life in these countries or whether the disease does not receive the recognition it gets in English-speaking countries.

One of the arguments to the effect that the non-existence of autistic children among the Hispanics is not a accurate reflection of the facts is that such children may not be brought to the attention of psychiatric facilities, or that possibly, they could be diagnosed as being mentally retarded. There is such a possibility in developing countries, but it would be hard to explain Padilla's statement that "nothing has been written on autism and Hispanic Americans."

Infantile autism also seems to be a rarity among Black children. During a lecture, Dr. Ruttenberg made some comments about the lack of autism among black children and also the lack of autism among non-Westernized Japanese. In a letter confirming his statement, he writes:

> "...The Japanese psychiatrist who visited us was from Kobe University and it was 10-12 years ago. He had never seen an autistic child from non-Westernized Japanese parents but saw symbiosis from them and did see autistic children from Westernized Japanese. I said in our years located in a Black hospital (until 1968) we had never seen a truly autistic black child. (We saw other basically brain damaged with autistic-like symptoms but not the full syndrome). After we moved to a university setting we began seeing a few autistic children among Black upwardly-mobile families - the first was from a social worker father and computer-programmer mother. We have since seen more - some from low socioeconomic level Blacks, but in all instances, with intelligent parents. Again there are many more that I would give a primary diagnosis of organicity with autistic defenses or autistic-like mannerisms (letter dated November 22, 1979).

Von Brauchitsch and Kirk (1967) reported, after studying 141 patients at the Child Psychiatry Division of Ypsilanti State Hospital (Michigan), that the diagnosis of schizophrenia seems to be more frequent in hospitalized children from upper socio-economic classes. They also found that the prognosis of the disease is apparently less favorable in the upper classes, with ".. a higher tendency to run a chronic, unremitting course. Almost all of the twelve children who showed "autistic" features belonged to the upper class. Only two schizophrenics from the low socio-economic class were regarded as autistic children.

on infantile autism with black children. He responded:

> While I was a Chairman of the Department of Psychiatry at Henry Ford Hospital, I had occasion to see autistic children in consultation, and my observation at that time seemed to confirm my original hunch regarding a possible social etiology of childhood autism. I did not any longer formulate an idea that autistic children were necessarily the result of upperclass upbringing,but I noticed with very few exceptions the prevalence of the classic autistic symptoms in children originating from families who had undergone a rapid transition through social strata. Almost always was it possible to discover the element of overwhelming social insecurity or social incompatibility in the parents. Thus, for example, there was only one black autistic child in the entire group, but it was the son of a black physician who practiced entirely in a white neighborhood. Another autistic child seemed to originate from a lower class family--the father being a truckdriver, but on inquiry it turned out that the mother had a Ph.D., etc.

Another research which has cultural implications is the study conducted by Kaffman (1972) the Medical Director of the Kibbutz Child and Family Clinic in Tel Aviv, Israel. He pointed out that it would be very hard to find any other place in the world where children would be subject to more intensive psychiatric observation. While he considers his sample small, he indicated it is worthwhile mentioning that out of a patient load of 3,000 children during a period of 15 years, he was able to identify only eight children who seemed to suffer from early childhood psychosis with autistic features. However, all of them displayed "soft" signs of neurological impairment. Epileptic fits, complication of pregnancies, premature births were implicated.

In the course of these years Kaffman failed to find a single "pure" case of psychogenic psychosis prior to the age of twelve. Kaffman offers two hypotheses to explain this total lack of childhood psychosis. The first is that child rearing practices in the kibbutz may prevent psychotic illness in children, which, incidentally, is subscribed to by Bettelheim. The second is that early detection of deviation from normal standards, with immediate intervention, could be responsible for this non-existence of psychogenic psychosis. Kaffman is more inclined to support this second hypothesis.

Since the article was written in 1972, Dr. Kaffman has identified seven other cases of psychosis in children which, likewise, he considered organically determined. (Personal Communication).

Ney et. al., (1977) reported that while they were able to locate studies of autistic children conducted in Japan, he was unable to locate studies conducted in China. Reports on psychopathology among Chinese do not mention autism. They found, through personal communication, that no children referred to the Peking Hospital have been diagnosed as autistic.

However, while working in Hong Kong, Ney et. al. (1977) were able to identify fourteen children who could be described as autistic. The ratio for boys was unusually high--13:1. While he points out that such children are to be found in all socieconomic classes, it is suggested by the writer that his group was far from being representative of the Hong Kong population. Forty-three percent of the parents had automobiles, and apartments larger than 800 square feet. There were fewer grandparents in the home, compared to the rest of the population. It is felt that the standard of living of the average Hong Kong Chinese family would be considerably lower than the families of the autistic children mentioned.

While Ney et. al. indicated similarities between these Chinese children and their Western counterparts, they found that they differed mainly by having closer human relationships and more self-awareness. They felt that in tightly structured family situations and relatively crowded conditions, the Chinese autistic child may have more opportunities for contact and non-verbal communication. While they are more social and socialized, they are still inept at verbal expression. However, there is some question regarding the authenticity of their being autistic if Kanner's criteria are used. They make the appropriate remark that if emotional detachment is crucial to the diagnosis,

Kanner's observation may need to be modified. Chinese parents appear to be more emotionally involved with their autistic children and their children with them.

Recently the author conducted an as yet unpublished analysis of the case records of thirty-two psychotic children admitted to the New York Psychiatric Institute. The sample consisted of sixteen Jewish patients, nine Protestants, and nine Catholics, all white.

Of the Jewish children one had clearly been identified as autistic while all the others had acquired speech. The single autistic child came from a family in which the fathe had a Ph.D. in biology and was well-known in his profession. During one of his interviews the father mentioned his child was a good example of the autistic child described by Kanner. The data on this case record revealed the father to exhibit a constant aloofness from his family, characteristic of the "refrigerated parent" described by Kanner.

Of the nine Protestant patients four were identified as autistic children from upper-class homes with fathers engaged in professional occupations. The five other children came from lower-class homes. Among the nine Catholics, only one child was identified as autistic; the father in this case was an accountant. The other children in this group came from lower-class families, and the fathers were laborers.

Besides his own efforts, the writer was instrumental in encouraging two students to conduct research in childhood schizophrenia while he taught at Yeshiva University. Korn (1963) studied Black and Puerto Rican children who had been diagnosed as schizophrenics, and described the symptomatology as follows:

> "The dominant characteristics of the premorbid symptoms of schizophrenic behavior were extremely poor impulse control, low frustration tolerance, impaired reality testing, and homicidal tendencies. Negro and Puerto Rican children generally showed similar symptoms. Six of the Puerto Rican and four of the Negro children had set fires. Among the Negro children, extreme antisocial, aggressive behavior occurred slightly more

> more often. Stealing, fighting, hyper-restlessness, and unmanag able behavior were noted frequently. The Puerto Rican children showed a slightly higher tendency to mutism, bizarreness, inappropriate affect, and poor reality testing" (p. 75).

Korn indicated that in approximately sixty cases of Puerto Rican and Black schizophrenic children none could be described as autistic or symbiotic. It would seem that the predominant symptomatology was aggressiveness and bizarre behavior. All seem to have acquired speech. Thus, Korn (1963) anticipated Goldfarb's (1970) later firding that Black and Puerto Rican children accepted at Ittleson Center had poor impulse control.

Shodell (1967) compared the psychological adjustment of verbal and nonverbal children who had been diagnosed as schizophrenics. While the sample was small, twenty in each group, the variation in verbalizing ability as it related to religion and nationality was interesting. The ratio of verbal to nonverbal Jewish children was 1 to 1; Protestant children, 1 to 2.3; Italian children 4 to 1; and Irish, 1.7 to 1. All these children were from middl e and upper-class homes in Nassau Country, New York. Nonverbal children appeared to be least frequent among the Italian families and most frequent among the Protestant families.

Besides the two doctoral dissertations which were discussed in which the ethnic background of schizophrenic children was controlled, it has been impossible to find any study in which children's nationality was taken into serious consideration except in the following research in Australia, and Africa.

Harper and Williams (1976) in a 20-year large-scale study of the parents of autistic children in New South Wales, Australia, found that autistic children of Greek and German parents were significantly over-represented in relation to their population in New South Wales. However, there was complete absence of Italian and Yugoslav autistic children. These two groups represented the larges group of immigrants. In

a later statement, Harper (1976) made the following remarks: "The incidence of autism in the children of Greek parents was very high and compared with its non-occurrence in the children of Italian parents, was remarkable" (p. 721). According to Harper and Williams, the reasons which were given for the high incidence of Greek autistic children is the fact that about 70 perc ent of the Greek mothers, as compared with 30 percent of the mothers in the population at large, are working mothers. They indicated that "children are left by themselves locked up in a room upstairs or at the back of the shop for almost the entire day while parents serve customers or while father is at work and mother is sleeping before going for night work; thus family life is quite disturbed" (p. 721). The fact that not a single Italian or Yugoslav child was found to be autistic naturally requires some explanation. Perhaps it can be attributed to differing patterns of socialization and family interaction among these ethnic groups.

Cronin (1970) reported that among the Sicilian Italian immigrants in Australia, there has been virtually no change in relation with members of the extended family. (p. 26).

Lotter (1978) has to date been the first researcher who extended his interest in studying autistic children to indigenous populations of developing countries. He pointed out that the psychological environment for children of developing countries was different from the technologically developed countries where childhood autism has been well described. A cross-cultural research would tend to clarify the question of primary and secondary psychogenic influences, which has been a problem in the West. Some believe that etiologically, the symptoms of autism are secondary to the more basic impairment in language and cognition (Rutter et. al., 1971a).

Lotter visited nine major cities in six countries in Africa, and compiled a list of 1312 disturbed children. He was able to identify nine children who could be called

"autistic", and thirteen "non-autistic". Looking at the background of this small group of children, while inter-group differences according to social class were not significant, they all followed the same pattern. If Lotter included the five cases of mixed race children in his sample, then 78 percent of the autistic children would belong to the elite. The small number of autistic children which Lotter found in six countries in Africa has led him to write: "A possibility therefore is that autistic symptoms generally are less common in the African countries we visited than in Britain." Furthermore, Lotter indicated that a behavioral comparison with a British sample seems to show that some prominent features of the syndrome were found to be very uncommon in Africa, particularly rocking and head banging.

It is possible that in countries where child psychiatry is not very well developed, autistic children are not recognized as such and as a consequence may be diagnosed as mentally retarded. For example, it is possible that in Mainland China, there are no autistic children reported not because they do not exist but probably because the number of Western-trained psychiatrists are too few in number. On the other hand, in Hong Kong, which can be assumed to contain a number of Western-trained psychiatrists, autistic children can be identified but they manifest differences in their autistic behavior which may be due to cultural factors. On the other hand, the Western type of syndrome is quite recognizable in Japan. Tinbergen, in a communication to the writer, indicates that there was a request of almost 5000 copies of his translated paper on infantile autism, while 1000 of this paper was sold in English. Dr. Tinbergen, commenting on Ney's findings, likewise feels that autism may not be recognized in China, but on the other hand, since Red China has re-established the old closely knit Chinese group system "in which the care for even a slightly abnormal child is so to speak everyone's business", it might actually prevent a good number of children

from becoming emotionally damaged.

Countries which seem to have a large number of very disturbed children are the U.S.A., England, Canada, Australia and Japan, which are some of the most industrialized nations of the world.

SUMMARY AND CONCLUSIONS

In this paper I have discussed the extreme sensitivity of the neonate in his new environment minutes after his birth. It was shown that in the extended family structure, the mother has fewer problems in coping with the crisis in view of the general support she gets from her family. Empirical research has shown the importance of establishing mother-child "bonding" immediately after birth and the consequences if this bonding does not take place. It was stated that a majority of psychiatrists feel that childhood psychoses are basically of organic origin, particularly in infantile autism. However, the evidence available for a theory of organicity seems to be rather weak. One general finding is that the intellectual and financial superiority of parents of autistic children is inconsistent with the organicity argument as reported by Cantwell and others (1978). It was shown that in the more advanced, Westernized, industrialized countries, where there is a greater tendency towards nuclearization of the family, there seems to be a higher percentage of cases suffering infantile autism. According to some reports, the Italians, Hispanics and Israeli children living on the kibbutzim seem to be immune from the disease. Some evidence in support of these speculations has been provided from anthropological research which showed that the national groups living around the Mediterranean do not seem to have genuine cases of infantile autism.

Two major researchers on child development have postulated that the environment may influence the development of serious illness among children. However, both researchers feel that they have to introduce a constitutional factor into the picture.

Jerome Kagan of Harvard University has pointed out that schizophrenia can occur only when a child has a biological predisposition to it. On the other hand, the disease cannot appear unless the emotional environment encourages it through maternal rejection or indifference (Belz, 1979). In the same vein, Dr. Richard Granger, Professor of Pediatrics at the Yale Child Study Center, writes the following in connection with the development of serious mental illness in children:

> "Our studies make it clear to us that the biology--what might best be called the bio-psychology--of the infant and the personality structure of the parents interact with the infinite variety of patterns one might expect from two such complex systems. In some case where there is extreme deviance on one side or the other--the psychotic parent, the autistic child for example--responsibility may be more one sided, but in the overwhelming majority of parent-child relationships, it is the interaction between them which is critical and which must be assessed carefully" (1979, p. 19).

(1978)
Granger/ likewise, feels that the changing nature of the family has created incredible pressures and strains upon that institution. The smaller the family unit the less likely it is that adults and children will find the emotional satisfaction and the variety of interactions they want and need. Willner and Sporty (1978) have pointed out that the dissolution of the family network is also a major cause of psychological morbidity in the elderly.

Dr. Tinbergen in one of his letters to the author of this paper is convinced that infantile autism is a "disease of civilization." As an end befitting this paper, I shall conclude with an article written by a layman, Mr. Robert J. Christian (N.Y. Times, June 19th, 1979) "Let Me Hug My Sons as They Grow Older."

> It's Father's Day again. I'm tensing up. My stomach is tightening up. I envy the homes where it has meaning. To me it has always been embarrassing.
>
> There are many like me. Most of the men in the country. Oh, how we envy the Jewish, Italian and Russian heritage of affection man for man, father for son this time of year.
>
> For most men the urge to show affection to our sons is second,

if that, only to the sexual urge. But holding us back is a tradition and heritage stronger than the hug of a grizzly.

Contrary to the belief of many women, men are not letting down their emotional barrier. At least not those of us over 50.

There has to be an answer somewhere between the syrupy relationships on the TV screen and the austere handshake most of us use for affection. We're like the father in the commercial aching to take his son in his arms after a tough hockey game loss, but who ends up only giving him a Lifesaver and some stilted dialogue.

Sure, I held and rocked and kissed my sons while they were infants and loved every minute of it, even half asleep at 3 A.M.

But as they grow older, it's handshake on playing a great high school basketball game. More handshakes at graduation. And a turned back to release a tear of joy when another is accepted in medical school. More handshakes. God, how I hate handshakes. Why do we fathers let go after our sons grow out of their infancy?

But what's a father to do? Handshakes are passed on from father to son and on and on through generations. And I've passed it on as the ritual between father and grown son. As much as I want to hold, maybe they want me to. I don't know. But without an answer, they will act the same way to their sons.

Take your gold, reach your goal, be a winner, but just let me be free of the grizzly. Let me hug my sons as they grow older. My whole body aches to do it, but I can't. I so want to.

While each and every one of the arguments presented in this paper seems to be far away from the actual development of infantile autism, a cumulative examination of all the data strengthens the speculation that the problems of living in modern times develops increased stress in children, leading to mental illness. A national survey of children aged 7-11 by Temple University Institute of Social Research (1976) reports an increase of at least 60% over the rate of visits to psychologists and psychiatrists found in a federal health survey conducted ten years earlier in 1966-70.

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